

EDITORIAL

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We would like to welcome all readers to the first edition of Volume 1, Issue 1 of the The Nepalese Journal of Engineering (NJOE), covering interesting and original research papers on engineering realm.

The NJOE is an outcome of the synergy achieved through the coordination between teachers and students for meeting the deficiency of engineering journal. The submission of manuscripts for the first issue of the NJOE remained positive with fourteen accepted manuscripts being retained for presenting in this volume.

The accepted contributions are from all aspects of engineering field. The first contribution is of A.D. Koirala, A. K. Joshi, B. Dahal., and G. B. Joshi who describe the design approach towards the construction of an earthquake warning and follow-up system, TremorFlash. The authors were selected as one of the top ten finalists for the present work in CSIDC 2004, an annual international computer-based system design competition organized by the IEEE Computer Society.

A. Timilsina of Tribhuvan University analyses concise insight model to deal with cooperation and coordination within a Multi Agent System (MAS). The author presents a complex case of cystic fibrosis and demonstrates that how this whole system is applied in medical diagnostics.

The status of the existing water treatment plants in Kathmandu valley have been studied in detail by B.R. Kansakar of Tribhuvan University. He shows that most of the water treatment plants are in poor condition and very poorly maintained. Further, among the existing

water treatment plants, he states that the Mahankalchaur water treatment plant is working most satisfactorily.

It is a pleasure to see the submission from Pokhara University, perhaps a first for the NJOE, which describes that numerous activities associated with present trend of rapid urbanization and haphazard urban (re)development in the historic core area as well as in the peripheral agricultural lands of Kathmandu are responsible for increasing earthquake vulnerability, exposing higher percentage of population under seismic hazard, and decreasing the capacity of urban and emergency services to cope with disaster in many ways.

H.P. Pandit of Tribhuvan University describes sediment problems and sediment related wear and tear in hydropower projects constructed in Himalayan Rivers. We.M. Amatya of same university investigates the contact time analysis in dechlorination for adsorption process.

J.P. Ghimire and Y. Matsumoto, A. Nattapong, H.Yamaguchi of Saitama University analyze the applicability of the sensitivity-based model updating technique to the identification of structural changes made in an existing structure with a pile supported reinforced concrete building undergoing major renovation.

K.K. Jha of Tribhuvan University analyzes a flexible pavement structure using mixed two fields finite element method. M.K. Pandey of same University analyses the quality of the Bagmati River using Extended Biotic Index (EBI) method. He finds

that the middle part of the river between the Sundarikal and Khokana is highly polluted. He states the importance of biological parameters to assess the quality of the river system.

M. A. R. Sarkar and M. Obaidullah of Bangladesh University of Engineering and Technology describe the pre feasibility of cogeneration in a hotel in Bangladesh. M.P. Aryal of Tribhuvan University identifies some correlations between destructive and nondestructive parameters. The author adopts compressive and tensile strengths as destructive parameters, and rebound numbers and ultrasonic pulse velocity as nondestructive parameters.

Earthquake has been major subject in the first issue of NJOE with the three numbers of manuscript being submitted. The last contribution in this field is by P.N. Maskey of Tribhuvan University who shows that the free field hazard curves and the ground motion parameters vary from site to site, and are significantly influenced by the overlying soil characteristics of specific sites.

S.R. Shakya of Tribhuvan University describes a case study made with quantitative and qualitative analysis of reduction in greenhouse gas emission due to the implementation of the Alternative Energy Promotion Center/ Energy Sector Assistance Program subsidized/supported renewable energy technology projects consisting of solar home system, micro-hydro plant and improved cooking stove.

Finally, S.R. Tiwari of the Tribhuvan University makes a fresh investigation of the occurrences of buildings with architectural forms and expressions similar to the tiered temples of Nepal, in Nepal, China, Korea, Japan and Indonesia and analyses their relationships based on style and symbolism.

In addition to the print edition of accepted manuscripts, the NJOE and The Horizon are pleased to announce a new service for our authors and readers: Online edition, the immediate publication of abstract of all accepted paper. It will be no longer necessary to wait for printed versions to access to the important findings of accepted manuscripts. These can be found via The Horizon Web page:

<http://www.thehorizononline.com/njoe/abstract/>

Further, NJOE has decided to charge US\$2 per page of final accepted manuscript as publication charge, to provide sustainability to it.

To conclude, we thank all authors who submitted their papers to this issue, all referees whose hard work and suggestion helped to improve the presented contribution and the Institute of Engineering (Dean Office, Pulchowk Campus, and Soil Testing Laboratory), White House College and Winrock International/Nepal for their financial support in the publication of this first issue.

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